

Appl. No. 10/079,134
Amd. Dated October 7, 2003
Reply to Office Action of August 8 2003

Amendments to the Specification:

Please replace the paragraph beginning at page 5, line 10, with the following rewritten paragraph:

As shown in Panels IIIa and IIIb, the labeled oligonucleotide probe/target is then exposed to polymerase extension reagents, e.g., a DNA polymerase enzyme and dNTPs, which are intended to extend the probe sequence from the terminal interrogation base. As noted above, since the terminal interrogation base is disposed at the 3' terminus of the probe, the polymerase is preferably a [[3'-5']] 5'-3' polymerase. Examples of particularly preferred DNA polymerases include Klenow fragment, exonuclease minus Klenow, Taq polymerase, Thermosequenase (available from APBiotech, Inc.), or the like. In the case where the probe/target hybrid is a perfect match, e.g., the interrogation base is complementary to the position of interest in the target, the extension reaction will occur as illustrated in Panel IIIa. However, where the interrogation base is not complementary to the position of interest, no extension reaction will occur, as shown in Panel IIIb.